

Description

Method for determining the effects of fancy yarn

The invention relates to a method according to the preamble of claim 1.

When producing yarn, a uniformity of the yarn, which is as high as possible, is generally aimed for within narrow tolerances. On the other hand, the non-uniformity of the yarn is characteristic of fancy yarns. A yarn, in which thick locations with predetermined larger diameters and with predetermined lengths, the so-called effects, are present, are referred to as fancy yarns. The yarn sections located therebetween with a smaller diameter are referred to as webs.

It is known to carry out a diameter average value determination at the beginning of measuring at a spinning station, over the first yarn metre. This so-called reference diameter is the reference diameter for further evaluations. In the case of a fancy yarn, a reference diameter determined in this manner would be indicated to be thicker owing to the presence of effects, in other words thick locations, than the thickness of the web actually is. The recognition of the formation of effects is only possible on this basis of a simple averaging to an inadequate degree.

DE 100 26 389 A1 describes a device for monitoring a running thread by means of a sensor mechanism of a spinning unit. If the value of the diameter exceeds selected tolerance limits over a predetermined length, the beginning of a fault location in the

thread is inferred. If the value of the diameter then moves for a corresponding length again within the tolerance zone, the end of the fault location is inferred. In the process, each of these exceedings of a tolerance is classified as a yarn fault. The diameter values detected consecutively on the running thread are detected as a curve course over the yarn length and the curve is filed in a data memory. The data memory contains predetermined curve course patterns, which represent a section of the curve course in the area of a fault location, as pattern types. These pattern types allow conclusions about the causes of the fault on the basis of the formation of their curve course. In order to establish whether a predetermined pattern type is repeated in the curve course, the curve course is compared with the predetermined pattern types. If, in the process, it is recognised in the curve course, that a fault location corresponds to a pattern type, the type of the fault and cause of the fault are determined with the aid of the recognised pattern type and elimination thereof is triggered. Although it is possible to improve the determination and quality of statements about faults and causes of faults with the device of DE 100 26 389 A1, it is not possible to adequately monitor on the running thread whether the diameters of effects are formed as desired.

The object of the invention is to improve the determination of effects of a fancy yarn.

This object is achieved by a method with the features of claim 1.

(Amended sheet)